

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/09478

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC: H01S 3/102( 2006.01),3/038( 2006.01)  USPC: 372/45.01,46.01,96 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 372/45.01,46.01,96  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5729566 (JEWELL) 17 March 1998 (17.3.1998), column 5, lines 59-67 to column 7, lines 43, and column 8, lines 7-23, column 11, lines 12-18 and 52-57	1-18
X	US 5719891 (JEWELL) 17 February 1998 (17.2.1998), Figure 5D to 5F and Figure 7 and column 7, lines 15-61, and column 9, lines 23-56.	1-14
A	US 6535537 (KINOSHITA) 18 March 2003 (18.03.2003)	1-14
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents:		
"A"	document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search 10 August 2006 (10.08.2006)		Date of mailing of the international search report 25 SEP 2006
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201		Authorized officer <i>Rhonda Lee Bess</i> Minsun O Harvey Telephone No. 571-272-1835